

F53 - SUPER DUPLEX - UNS S32750

MATERIAL DESCRIPTION

F53 Super Duplex UNS S32750 is a duplex stainless steel especially designed for service in aggressive chloride-containing environments. It has very good resistance to localized corrosion and stress corrosion cracking in combination with high mechanical strength.

APPLICABLE SPECIFICATIONS

ASTM A276/276M, ASTM A479/479M

NACE MR-0175/ISO 15156

NORSOK M-650, NORSOK M-630 - MDS-D57

1.4410. X2CrNiMoN25-7-4

HEAT TREATMENT

Intoco bar stock is in the solution annealed & water quenched condition

CHEMICAL ANALYSIS RANGE

ELEMENT	WEIGHT %	ELEMENT	WEIGHT %	
С	0.03 Max	Cr	24.0 to 26.0	
Si	1.00 Max	N	0.24 to 0.32	
Mn	1.20 Max	Cu	0.50 Max	
Р	0.035 Max	Мо	3.00 to 5.00	
S	0.02 Max	Ni	6.00 to 8.00	

TYPICAL MECHANICAL PROPERTIES (Min unless stated) SOLUTION ANNEALED CONDITION

0.2% Yield ksi (MPa)	UTS ksi (MPa)	Ductility		Ductility		Full size (10mm x 10mm) Charpy V Notch @ -46°C	Hardness HBW (HRC)
		%EI 4D	%RA	Ft-lbs (J)			
80 (550)	109 (750)	25	45	33(45) (≤200mm Dia)	271 (28) max		